

NOVELTIES IN THE ORCHID FLORA OF THE GUAYANA HIGHLANDS *

BY

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THE present paper, which is the first of two articles dealing with novelties in the Orchidaceae of the Guayana Highlands, treats eleven new species. The order follows that of the System proposed by Dr. Rudolph Schlechter in *Notizblatt des Botanischen Gartens und Museums*, Berlin-Dahlem 9, No. 88 (1926) 563-591.

Duckeella alticola *C. Schweinfurth sp. nov.*

Herba terrestris, pro genere robusta, nigrescens, circiter 50 cm. alta. Caulis glaber, saepissime superne inaequaliter bifurcatus. Folia valde coriacea, biformia; basalia pauca, oblongo-linearia, acuta, suberecta, usque ad 19 vel 22 cm. longa et 9-16 mm. lata; caulina duo, multo breviora, remotissima, elliptico-oblonga, acuta, 8.7-10 cm. longa, usque ad 1.3 cm. lata. Racemi in ramorum apice, densius pauci- vel pluriflori. Flores mediocres, aurei. Sepala crassa, concava, marginibus incurvis. Sepalum dorsale oblongo-ellipticum, acutum, circiter 2 cm. longum et 8.2 mm. latum. Sepala lateralia persimilia, dorso carinata. Petala latiora, ovalia vel late

* For the privilege of studying the extensive collections recently made in this region, I am indebted chiefly to a grant from the National Science Foundation.

EXPLANATION OF THE ILLUSTRATION

PLATE XXVII. DUCKEELLA ALTICOLA *C. Schweinfurth.*
1, plant, one third natural size. 2, flower expanded,
one and one quarter times natural size. 3, column
and lip, three quarters view, two and one quarter
times natural size.

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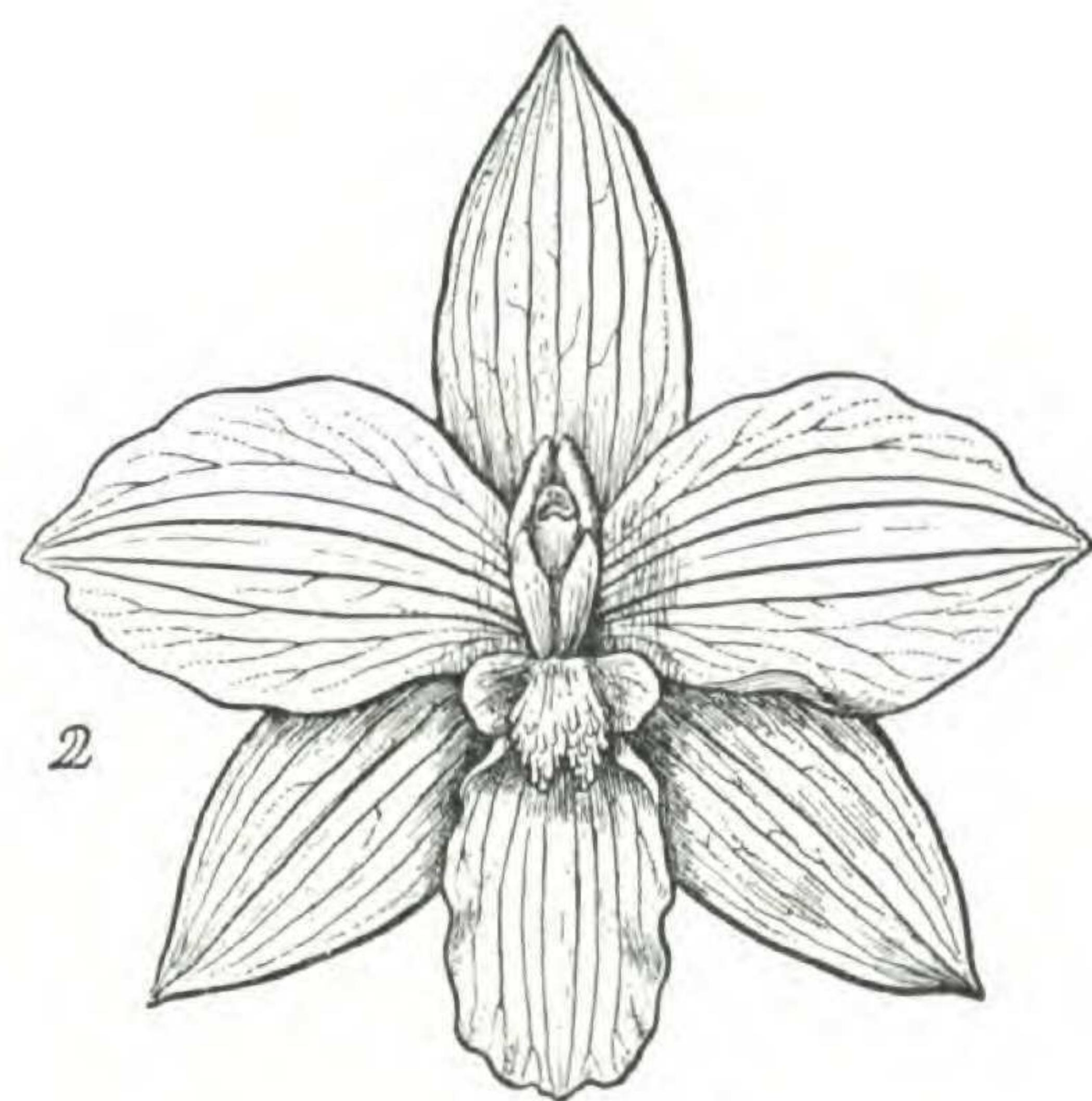
PLATE XXVII

DUCKEELLA
alticola
C. Schweinf.

1



2



3



E. W. Smith

elliptica, submembranacea, circiter 1.8 cm. longa et 1.2 cm. lata. Labellum in circuitu oblongum, circiter 1.75 cm. longum et 8 mm. latum, basi trilobatum cum lobulis parvis semiorbicularibus, apice truncato abrupte acutum; discus inter lobos laterales callo brevi pluristriato emarginato ornatus. Columna compare parva, circiter 8 mm. alta, cucullata, apice bifida, basi dente oblongo prominenti utrinque praedita.

This orchid differs conspicuously from the other species of *Duckeella* in having broader leaves, fleshy, concave and acute sepals, a relatively short callus on the lip and a pair of conspicuous teeth on the column. It is a comparatively robust plant of consistently rather high altitudes.

AMAZONAS: Cerro Duida, moist slopes of Savanna Hills, 1350 meters altitude, August 1928–April 1929, *G. H. H. Tate* 736; Cerro Sipapo (Paráque), near summit of West Peak, at 1750 meters altitude, infrequent in bogs, flowers yellow, fragrant, December 20, 1948, *Bassett Maguire & Louis Politi* 27797. BOLÍVAR: Cerro Guaiquinima, Río Paragua, occasional near Cumbre Camp, at 2000 meters altitude, flowers dull yellow, December 25, 1951, *B. Maguire* 32748; Same locality, rare in bog, along west escarpment rim 1 km. west of Cumbre Camp, at 1800 meters altitude, flowers yellow, December 30, 1951, *B. Maguire* 32830, 32839A; Same locality, frequent in bogs, "North Valley," at 1600–1700 meters altitude, flowers yellow with the outer members [sepals] bronze outside, January 4, 1952, *B. Maguire* 32973 (TYPE in Herb. Ames No. 69538).

***Sobralia speciosa* C. Schweinfurth sp. nov.**

Herba elata, speciosa, terrestris, 1–3 metralis (fide collectoris). Caules plusminusve robusti, vaginis longe tubularibus arctis glabris obtecti. Folia numerosa, disticha, lanceolata vel ovato-lanceolata, longe acuminata, plicata, supra nitentia, usque ad 15 cm. longa et 3.7 cm. lata. Inflorescentiae saepissime laterales (raro terminales), racemosae, laxe pauciflorae, suberectae. Flores magni spectabilesque, purpurei, membranacei. Sepalum dorsale oblongo-oblanceolatum, acutum, circiter 4.5–5.5 cm. longum et 1.3 cm. latum. Sepala lateralia similia, an-

guste oblanceolato-oblonga, paulo obliqua, dorso carinata, circiter 5–5.6 cm. longa et 1.3 cm. lata. Petala oblongo-ovata, apice late rotundata, sepalis latiora, circiter 2–3 cm. lata. Labellum majus, segmenta cetera superans, in positu naturali convolutum, expansum suborbiculari-ellipticum, circiter 6–7 cm. longum et 5 cm. latum, apice profunde bilobatum; discus carinis pluribus superne laceras percursus. Columna circiter 3–3.5 cm. alta, apice facula incurva utrinque ornata.

This species appears to be related to the Peruvian *Sobralia Weberbaueriana* Kränzl., but has smooth (not furfuraceous) sheaths, much smaller leaves and a dissimilar lip and column.

AMAZONAS: Cerro de la Neblina, Río Yatua, near Cumbre Camp, at 1700 meters altitude, occasional on low bushy slopes, "roots fleshy; corolla cerise; lip with median yellow line and several white lines; column whitish, pink-flushed," January 4, 1954, Bassett Maguire, John J. Wurdack & George S. Bunting 37028; Same locality, occasional in scrub forest 1 kilometer north of Cumbre Camp, at 1800 meters altitude, "fls. rich pink," January 10, 1954, Maguire, Wurdack & Bunting 37202; Same locality, locally frequent in scrub forest near Cumbre Camp, at 1800 meters altitude, "fls. magenta, the lip with subapical white area," November 19, 1957, Bassett Maguire, John J. Wurdack & Celia K. Maguire 42142 (TYPE in Herb. Ames No. 69507).

***Stelis latisepala* C. Schweinfurth sp. nov.**

Herba pusilla, caespitosa, epiphytica, 4–5 cm. alta. Caulis abbreviatus, circiter 3 mm. altus, vaginis laxis tubularibus omnino celatus. Folium erectum, oblanceolatum vel obovato-spathulatum, apice rotundatum, sessile, 8–14 mm. longum, expansum usque ad 4.2 mm. latum. Inflorescentia singula, folium multo superans, supra laxe pluriflora, usque ad 4.7 cm. longa. Flores perparvi, subcarnosi. Sepala transverse rhombico-ovata, acuta, trinervia, basi connata. Sepalum dorsale circiter 2.6 mm. longum et 3 mm. latum. Sepala lateralia similia sed minora, valde obliqua, usque ad 2 mm. longa et 2.5

EXPLANATION OF THE ILLUSTRATION

PLATE XXVIII. *SOBRALIA SPECIOSA* *C. Schweinfurth*.
1, plant, about one half natural size. 2, dorsal
sepal, three quarters natural size. 3, petal, three
quarters natural size. 4, lateral sepal, three quar-
ters natural size. 5, lip, three quarters natural size.
6, column from side, three quarters natural size.

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PLATE XXVIII



mm. lata. Petala minuta, rhombico-ovata, supra multo incrassata, circiter 0.7 mm. longa et 0.9 mm. lata. Labellum simplex, petalis simile, rhombico-ovatum, circiter 0.6 mm. longum et 0.9 mm. latum; discus callo carnoso transverso bilobato prope medium ornatus. Columna generis, minuta, supra abrupte dilatata.

This little plant seems to be allied to the Brazilian *Stelis parvifolia* Garay, but has larger glabrous flowers.

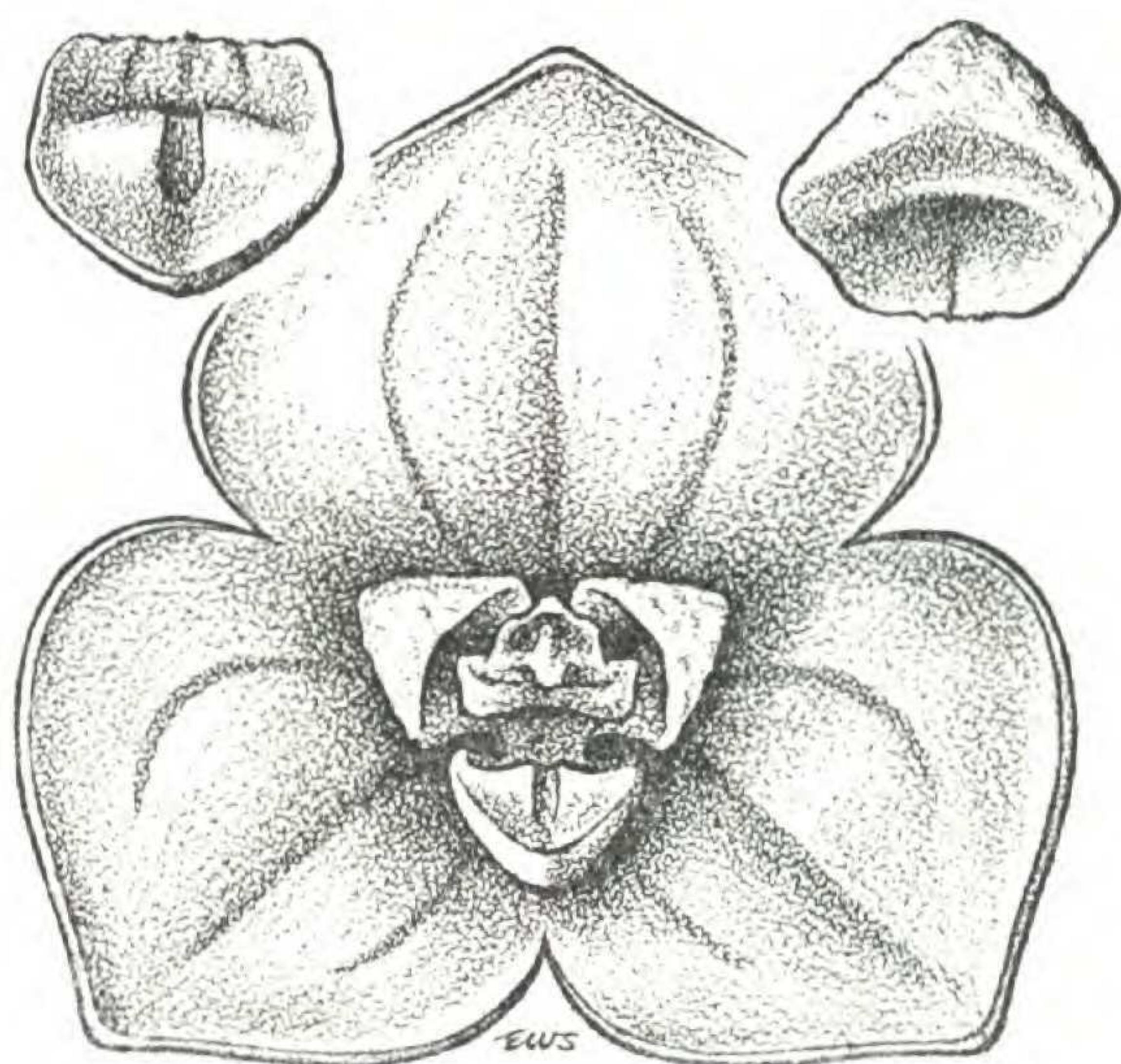
BOLÍVAR: Chimantá Massif, elfin forest formation on plateau of southeast-facing upper shoulder of Apácaro-tepuí, at 2000 meters altitude, "epiphyte on branch; leaves fleshy-coriaceous, pale green; scape brown-purple as are the pedicels; calyx [sepals] copper-brick with tawny-yellow margins," June 19, 1953, Julian A. Steyermark 75712 (TYPE in Herb. Ames No. 69505).

***Stelis obovata* C. Schweinfurth sp. nov.**

Herba parvula, caespitosa, epiphytica, usque ad 12 cm. alta. Caules approximati, breves, usque ad 1.3 cm. alti, bivaginati, vaginis arctis, tubulatis obtecti. Folium erectum, spatulatum vel oblanceolatum (raro obovatum), apice saepissime obtusum vel rotundatum, usque ad 2.8 cm. longum et 9 mm. latum. Inflorescentiae folium multo superantes, usque ad 10.3 cm. longae; racemus superne dense multiflorus, saepe secundus. Flores minuti, carnosiores. Sepala rotundato-ovata, obtusa vel subacuta, concava, trinervia, subaequalia, basi paulo conata, lateralia obliqua. Sepalum dorsale circiter 2 mm. longum et 1.8 mm. latum. Petala multo minora, in positu naturali cuneato-obovata, circiter 0.8 mm. longa et fere lata, parte superiore carnosissima. Labellum simplex, cuneato-obovatum, apice subtruncatum et incrassatum, circiter 1 mm. longum et latum; discus medio cum callo lanceolato-pandurato. Columna generis, minuta, supra abrupte dilatata.

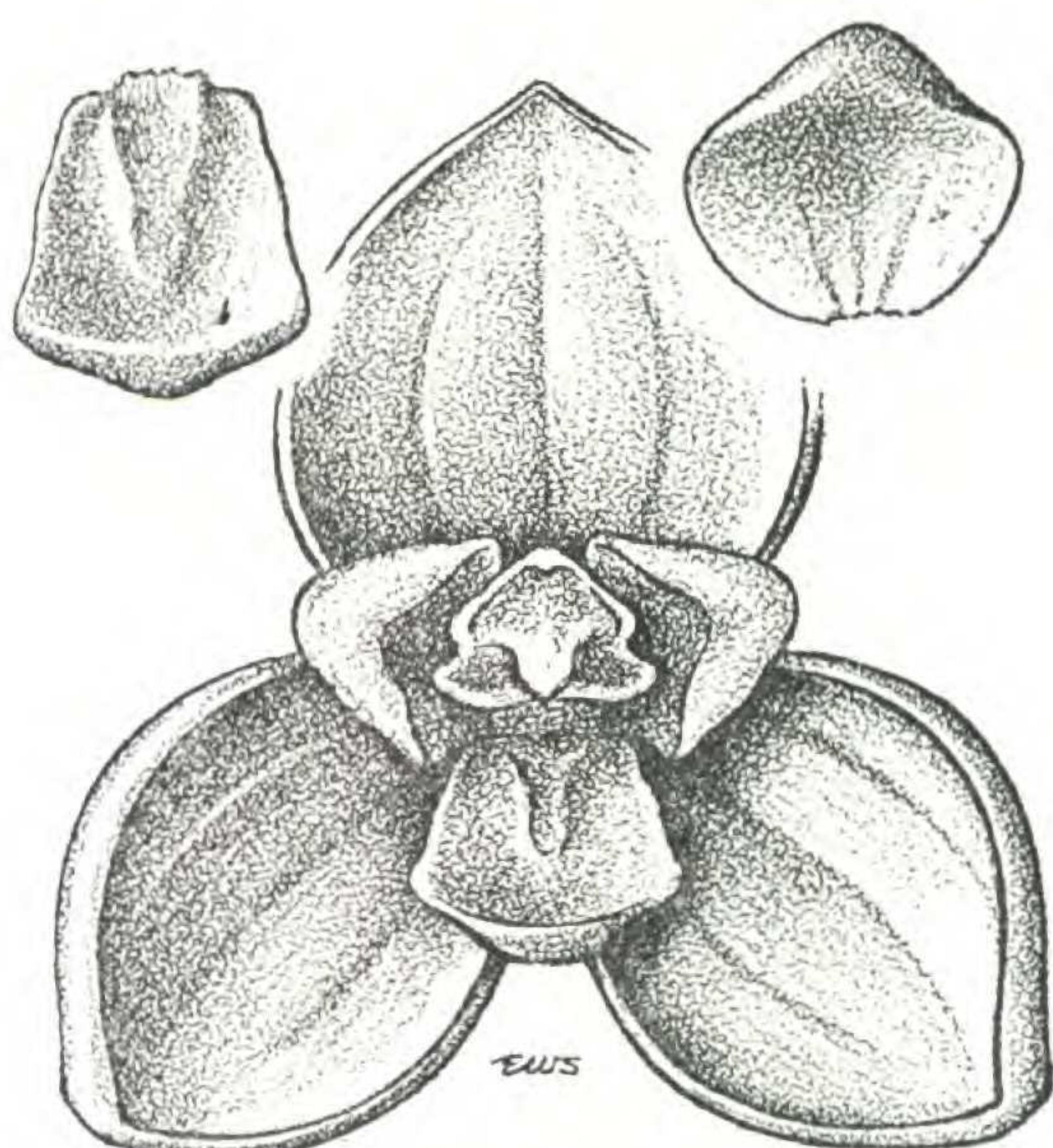
This species appears to be closely allied to *Stelis lentiginosa* Lindl., the peculiar lip being almost identical,

PLATE XXIX



STELIS LATISEPALA C. Schweinfurth

Flower expanded, lip and petal, all much enlarged.



STELIS OBOVATA C. Schweinfurth

Flower expanded, lip and petal, all much enlarged.

Drawn by ELMER W. SMITH

but it differs in having a caespitose habit of growth and much smaller flowers.

AMAZONAS: Cerro Huachamacari, Río Cunucunuma, epiphytic in cumbre near Summit Camp, at 1800 meters altitude, flowers cream-colored, December 14, 1950, Bassett Maguire, R. S. Cowan & John J. Wurdack 30204. (This collection differs from the type in its much smaller vegetative proportions and somewhat smaller flowers.) BOLÍVAR: Chimantá Massif, Central Section, on rocky slopes of zanjon bordering Upper Falls of Río Tirica above Summit Camp, at 1950 meters altitude, "epiphyte on mossy branch, lvs. coriaceous, pale green; peduncle and pedicels pale green; fls. greenish yellow," February 7, 1955, Julian A. Steyermark & John J. Wurdack 556 (TYPE in Herb. N.Y. Botanical Garden).

***Octomeria cordilabia* C. Schweinfurth sp. nov.**

Herba valde variabilis, caespitosa, terrestris vel epiphytica. Caules pergraciles, elongati, usque ad 37 cm. alti, multiarticulati, vaginis longe tubularibus arctissimis omnino velati. Folium lanceolato-lineare, sessile, apice minute et oblique bilobatum, crasse coriaceum, usque ad 6.6 cm. longum et circiter 5 mm. latum. Flores in folii axilla fasciculati, parvi, aurei vel aurantiaci, membranacei. Sepalum dorsale late elliptico-ovatum, subacutum, saepissime trinervium, usque ad 5.2 mm. longum et 4 mm. latum. Sepala lateralia breviora et latiora, orbiculari-ovata, saepissime trinervia, usque ad 4.3 mm. longa et 4.1 mm. lata. Petala late ovato-elliptica, subacuta, trinervia, usque ad 4.1 mm. longa et 3.4 mm. lata. Labellum segmentis ceteris multo minus, suborbiculari-ovatum, antice late rotundatum et minute apiculatum, basi cordatum, usque ad 1.7 mm. longum et 2.4 mm. latum; discus callis binis carnosis convergentibus ornatus. Columna parva, arcuata, basi apiceque dilatata.

This species does not appear at present to have any close allies. The relatively long stems, small leaves and entire lip are distinctive.

AMAZONAS: Cerro Huachamacari, Río Cunucunuma, between Summit Camp and "East Ridge" savanna, at 1800 meters altitude, in

densely wooded valley, December 8, 1950, *Bassett Maguire, R. S. Cowan & John J. Wurdack* 30035; Cerro de la Neblina, Río Yatua, near Cumbre Camp, in scrub forest along runlet, at 1700 meters altitude, on rocks and tree trunks, January 5, 1954, *Bassett Maguire, John J. Wurdack & George S. Bunting* 37067; Same locality, along escarpment west of Cumbre Camp, at 1700–1800 meters altitude, occasional terrestrial, *Maguire, Wurdack & Bunting* 37099; Same locality, on Caño Grande slopes, east of Cumbre Camp, at 1600–1800 meters altitude, on limb of low tree, November 22, 1957, *Bassett Maguire, John J. Wurdack & Celia K. Maguire* 42183; Same locality, near Cumbre Camp, at 1800 meters altitude, occasional terrestrial in scrub forest, November 29, 1957, *Maguire, Wurdack & Maguire* 42258 (TYPE in Herb. N.Y. Botanical Garden).

***Octomeria dentifera* C. Schweinfurth sp. nov.**

Herba parva, caespitosa, saxicola, usque ad 14 cm. alta. Caules graciles, breves, pauciarticulati, 5–8 cm. alti, vaginis longe tubulatis maxima pro parte obtecti. Folium erectum, lineari-lanceolatum vel elliptico-lineare, acutum, sessile, crasse coriaceum, 3.5–6.7 cm. longum, usque ad 6 mm. latum. Flores bini ut videtur, axillares, pro planta magni, membranacei. Sepala similia, trinervia, lanceolata, 10.5–11 mm. longa. Sepalum dorsale acuminatum, usque ad 4.2 mm. latum. Sepala lateralia paulo angustiora, leviter obliqua, longe acuminata, usque ad 3.5 mm. lata. Petala sepalo dorsali similia, ovato-lanceolata vel elliptico-lanceolata, acuminata, usque ad 10 mm. longa et 3.7 mm. lata. Labellum segmentis ceteris multo minus, in positu naturali oblongo-ellipticum et 5.4 mm. longum, infra medium trilobatum cum lobis lateralibus parvis auriculiformibus erectis et lobo intermedio compare magno, oblongo-ovato, antice subtruncato, marginibus irregulariter dentatis; discus in medio cum carnis binis carnosis. Columna gracilis, arcuata, circiter 4 mm. alta, in pedem conspicuum producta.

This species is allied to *Octomeria parvula* C. Schweinf., but is larger throughout with the flower nearly twice as

large. The specific name is in allusion to the dentate margins of the lip.

BOLÍVAR: Churu-tepuí (Muru-tepuí), northwest cumbres, occasional on rock ledges in upper cumbre, at 2250–2300 meters altitude, flowers white, January 26, 1953, *John J. Wurdack 34218* (TYPE in Herb. Ames No. 69525); Chimantá Massif, east central portion of summit of Apácará-tepuí, at 2450–2500 meters altitude, "on moist ledges of high large rock around cave recess, leaves dark purple or dull green with purple; pedicels reddish; sepals, petals and lip pale yellow, nodding," June 21–22, 1953, *Julian A. Steyermark 75867*.

***Octomeria filifolia* C. Schweinfurth sp. nov.**

Herba gracillima, epiphytica, caespitosa, usque ad 17 cm. alta. Caules tenues, pluriarticulati, circiter 3.5–9 cm. alti, vaginis longe tubulatis arctissimis celati. Folium angustissime lineare vel filiforme, in vivo subteres, usque ad 9 cm. longum et in sicco 1.5 mm. latum. Flores in glomerulis axillaribus, minimi, membranacei. Sepala trinervia. Sepalum dorsale oblongo-lanceolatum, acutum vel acuminatum, tubulari-involutum, circiter 3 mm. longum et 1 mm. latum expansum. Sepala lateralia triangulari-lanceolata, acuta, cum pede mentum formantia, circiter 3 mm. longa et 1.2 mm. lata. Petala lanceolata-linearia, acuta vel acuminata, tubulari-involuta, 1-nervia, sepalis paulo breviora, circiter 2.4 mm. longa et 0.6 mm. lata. Labellum parvum, tubulari-involutum, prope medium trilobatum, basi cuneatum, expansum circiter 1.5 mm. longum et fere 1 mm. latum; lobi laterales oblique semiovati, acuti; lobus intermedius multo major, suborbicularis, apice rotundatus et minute apiculatus; discus lobi medii basi obscure bicarinatus. Columna antice plana, circiter 1.4 mm. alta.

No close ally of this species was noted.

BOLÍVAR: Chimantá Massif, northwestern part of Abácapa-tepuí, vicinity of Camp 3, at 1300 meters altitude, on forested slopes adjacent to quebrada, epiphyte on tree trunk, "leaves purplish with green; petiole purple; flowers pale green with lavender," April 20, 1953, *Julian A. Steyermark 75181* (TYPE in Herb. Ames No. 69526).

Octomeria flaviflora C. Schweinfurth sp. nov.

Herba elata, caespitosa, terrestris. Caules pluriarticulati, usque ad 47 cm. alti, vaginis longe tubulatis marcescentibus maxima pro parte obtecti. Folium erectum, lineari-oblongum, apice minute tridenticulatum, basi sessile, valde coriaceum, usque ad 18 cm. longum et 1.4 cm. latum. Flores numerosi, in glomerulis axillaribus, flavi, membranacei, cum segmentis patentibus. Sepala petalaque lanceolata, acuminata, trinervia. Sepalum dorsale longe acuminatum, 8–11 mm. longum, 3–3.5 mm. latum. Sepala lateralia simillima, paulo obliqua, 8–11 mm. longa, 2.2–3.1 mm. lata. Petala paulo breviora, ovato-lanceolata, saepissime latiora, circiter 7–9.2 mm. longa, usque ad 4 mm. lata. Labellum segmentis ceteris multo minus, in circuitu ovato-oblongum, usque ad 5 mm. longum et 3 mm. latum, prope basim trilobatum; lobi laterales perparvi, anguste falcato-oblongi; lobus intermedius compare magnus, oblongo-ovatus, apice saepissime subtruncatus et medio acutus, cum marginibus denticulato-erosis; discus callis binis humilibus ornatus. Columna parva, arcuata, usque ad 3–4 mm. alta, in pedem brevem producta.

AMAZONAS: Cerro de la Neblina, Río Yatua, at 2000 meters altitude, locally frequent in rocky ravine 16 kilometers southwest of Cumbre Camp, December 1–2, 1957, Bassett Maguire, John J. Wurdack & Celia K. Maguire 42280; Same locality, at 1900–2000 meters altitude, locally frequent in upper Cañon Grande basin above Salto Grande, December 13, 1957, Maguire, Wurdack & Maguire 42362; Cerro Sipapo (Paráque), at 1600 meters altitude, occasional along streambanks in Caño Profundo, January 12, 1949, Bassett Maguire & Louis Politi 28315; Cerro Huachamacari, Río Cunucunuma, at 1800 meters altitude, occasional on left bank of Caño de Dios in cumbre near Summit Camp, December 6, 1950, Bassett Maguire, R. S. Cowan & John J. Wurdack 30024 (TYPE in Herb. Ames No. 69523); Same locality and altitude, locally frequent in dense woodland in cumbre along right fork of Caño de Dios near Summit Camp, December 13, 1950, Maguire, Cowan & Wurdack 30194. BOLÍVAR: Cerro Guaiquinima, Río Paragua, at 1500 meters altitude, occasional in open savanna on precipitous slope below west

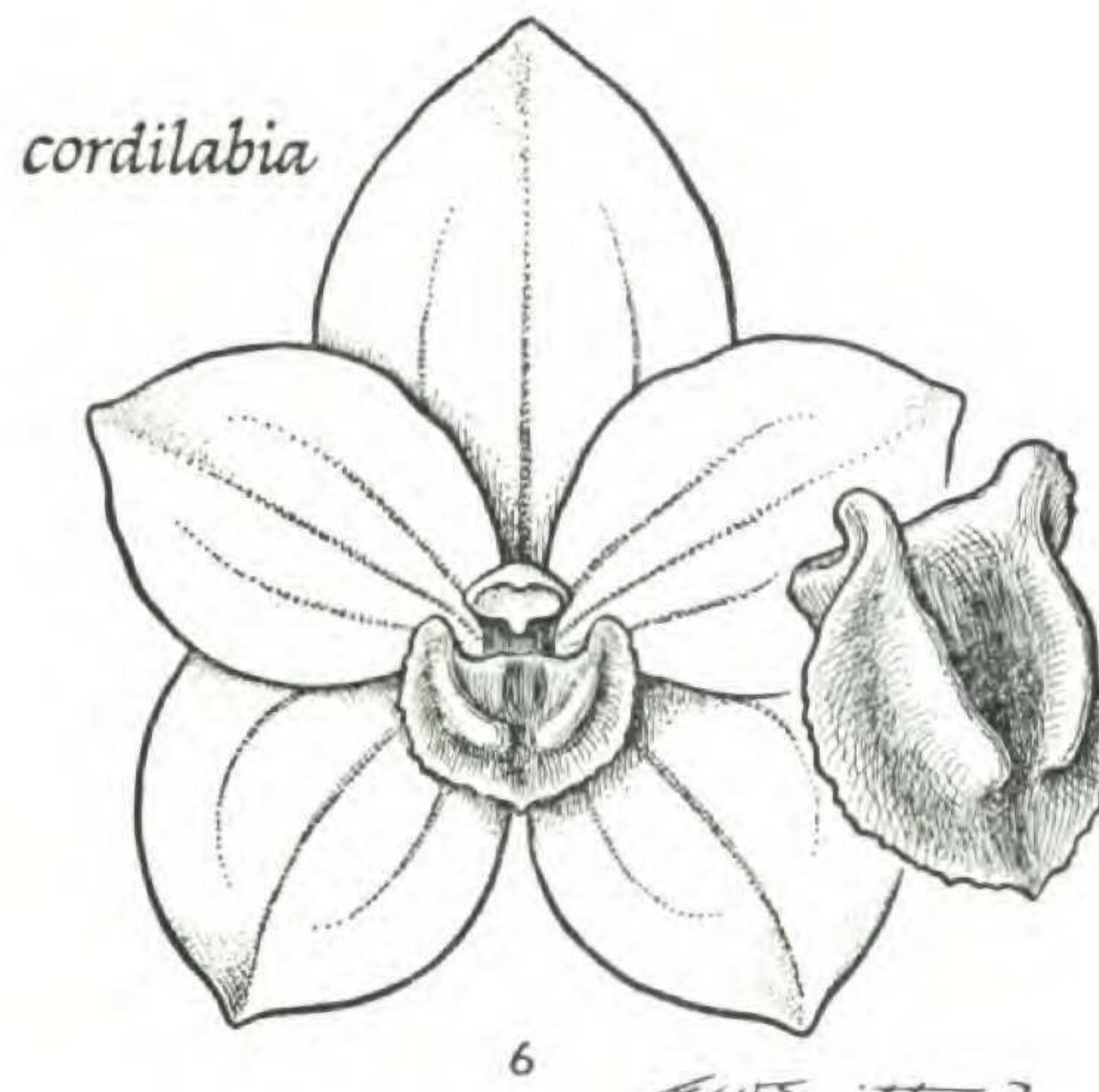
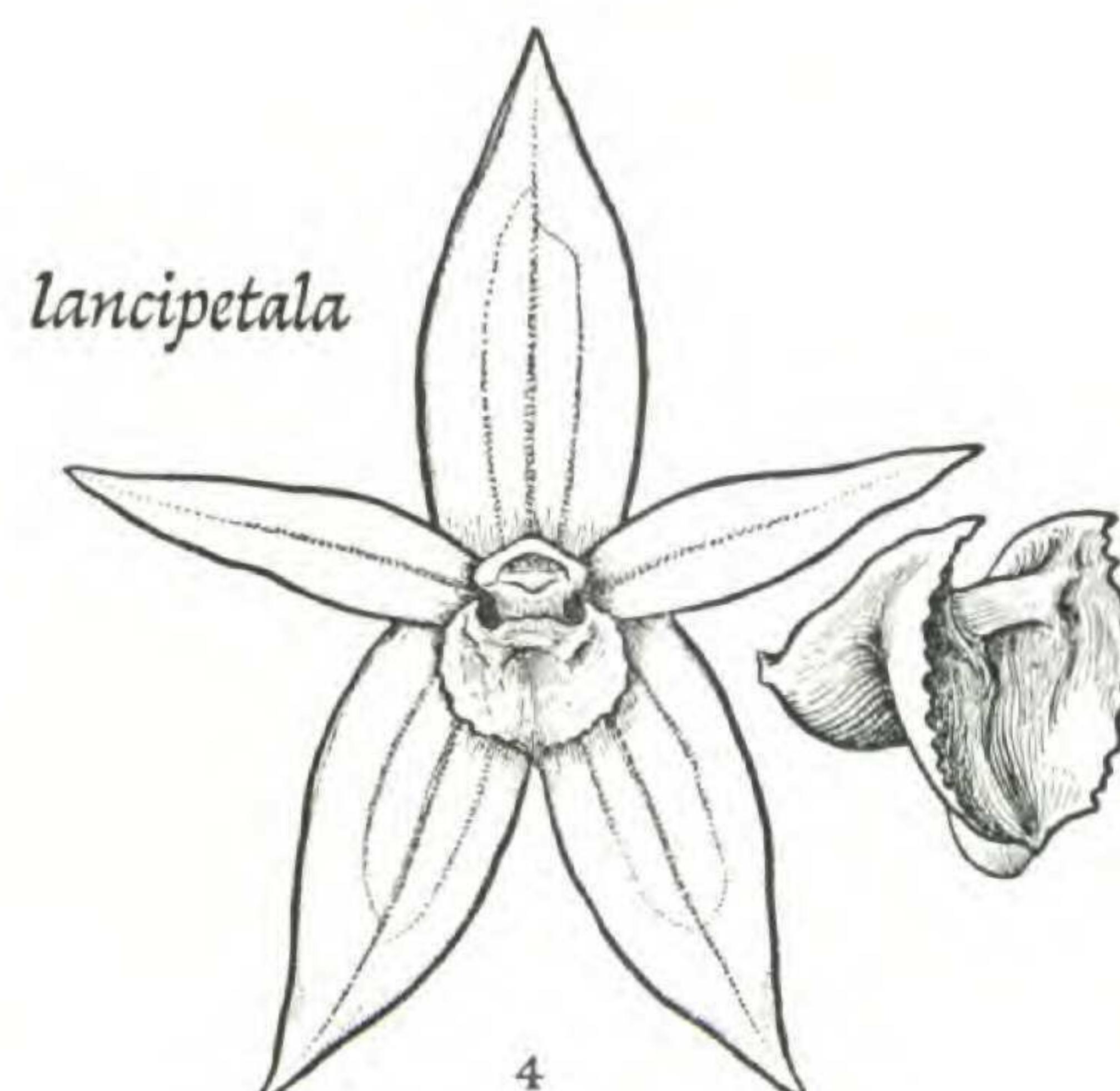
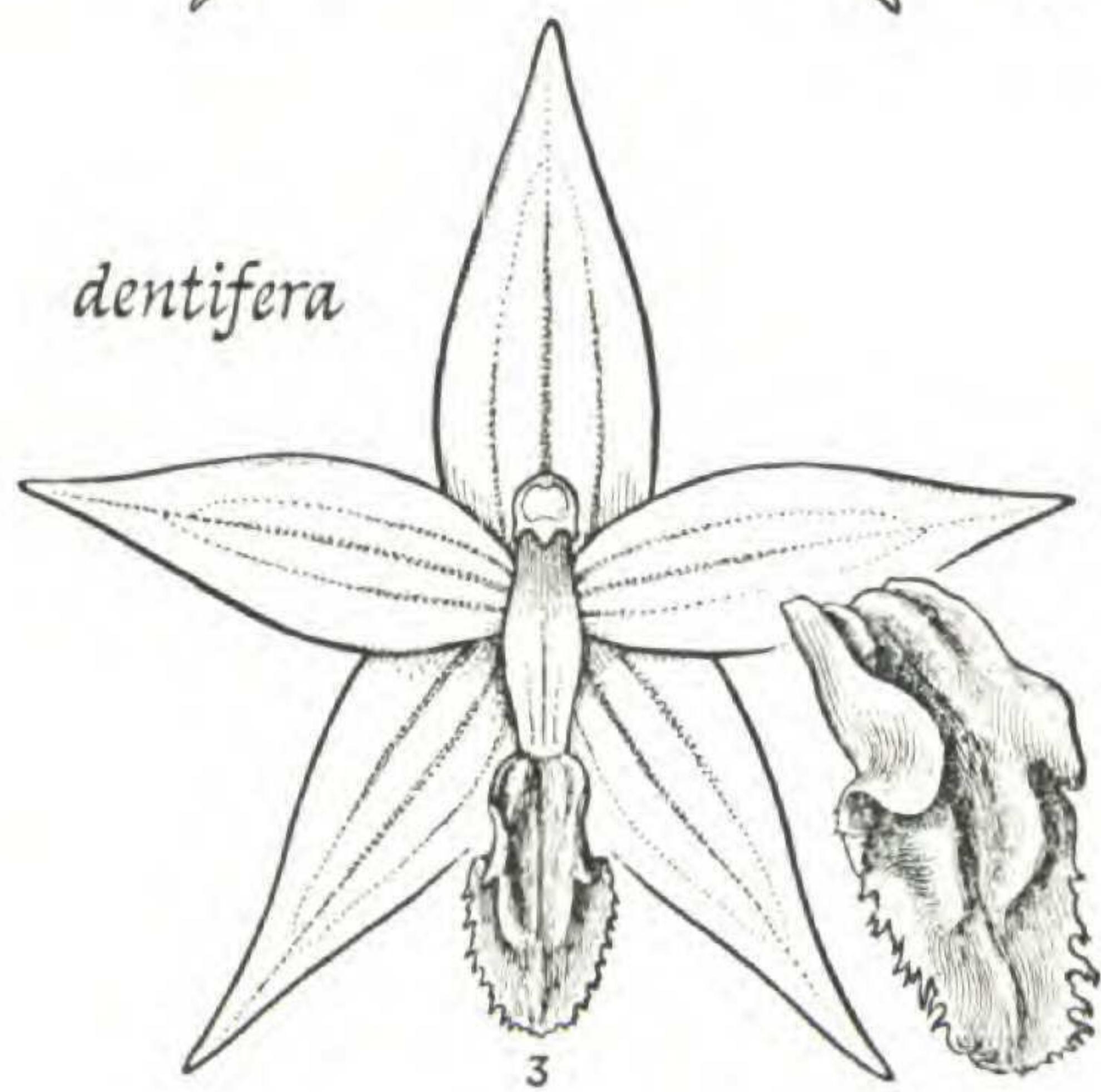
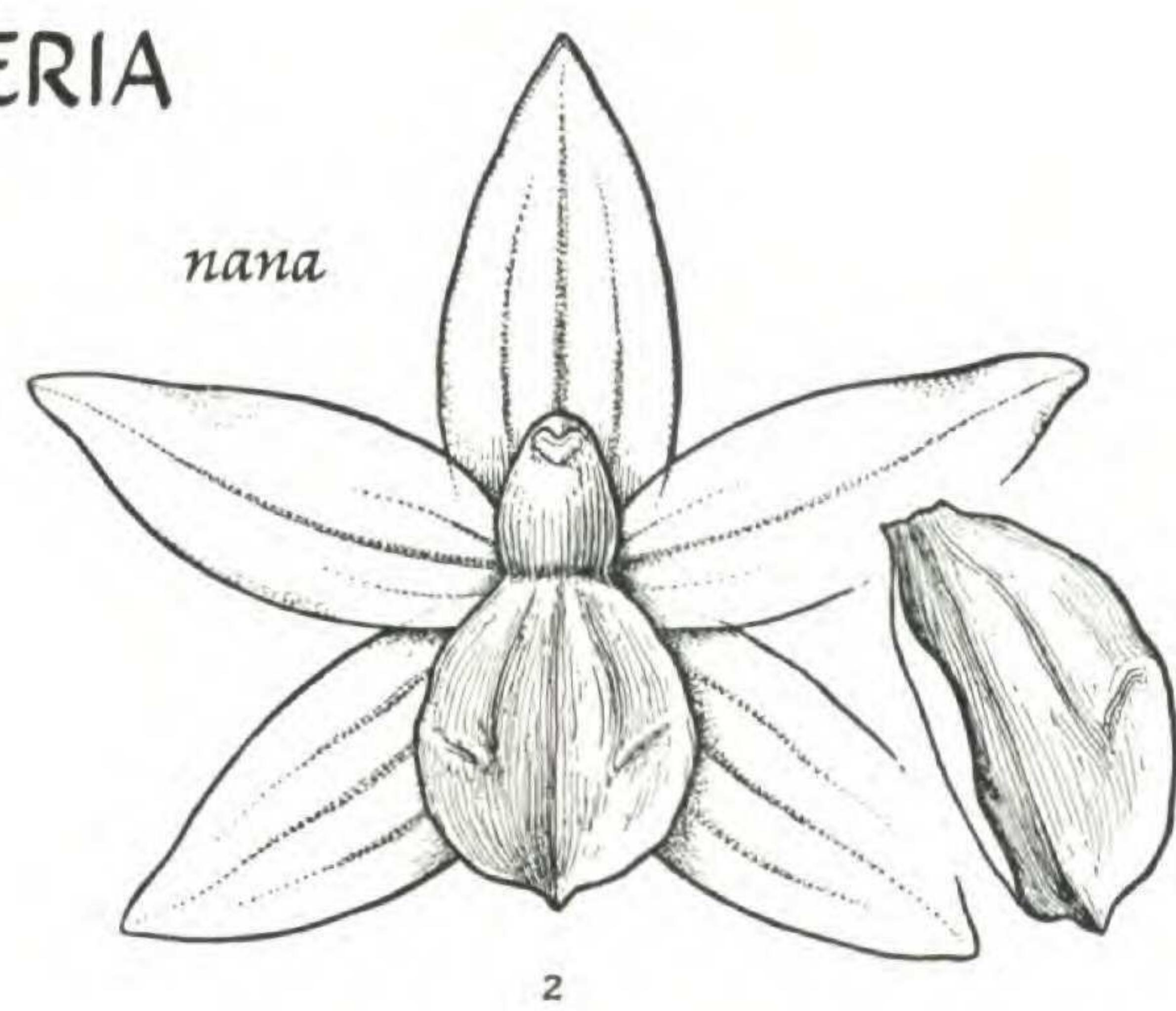
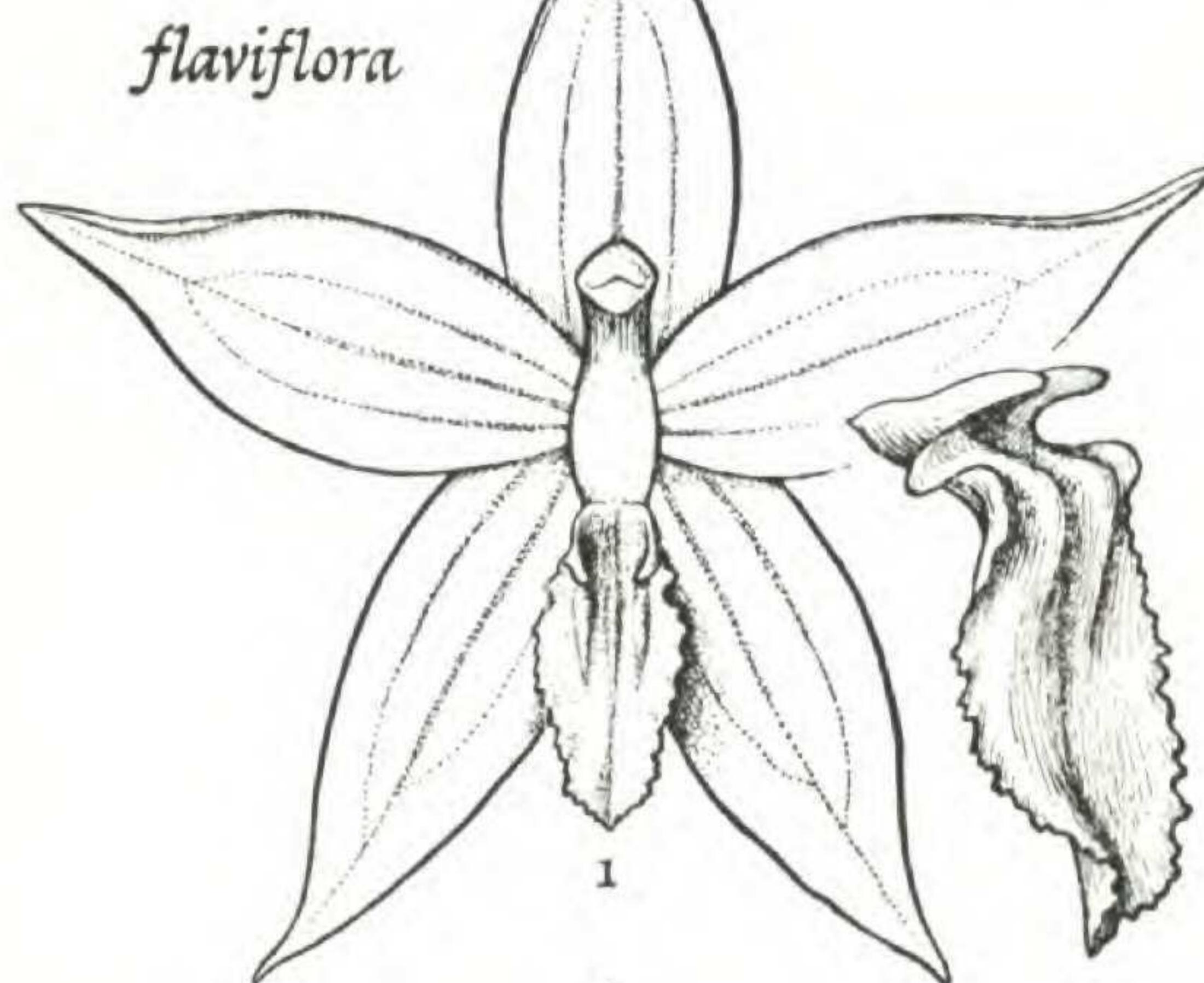
EXPLANATION OF THE ILLUSTRATION

PLATE XXX. OCTOMERIA. 1, *O. FLAVIFLORA C. Schweinfurth*. Flower expanded, three times natural size. Lip, three quarters view, five and one half times natural size. 2, *O. NANA C. Schweinfurth*. Flower expanded, eight times natural size. Lip, three quarters view, eleven times natural size. 3, *O. DENTIFERA C. Schweinfurth*. Flower expanded, two and one half times natural size. Lip, three quarters view, four and one half times natural size. 4, *O. LANCIPETALA C. Schweinfurth*. Flower expanded, five and one half times natural size. Lip, three quarters view, twelve times natural size. 5, *O. FILIFOLIA C. Schweinfurth*. Flower expanded, nine times natural size. Lip, three quarters view, twenty-two times natural size. 6, *O. CORDILABIA C. Schweinfurth*. Flower expanded, five and one half times natural size. Lip, three quarters view, twelve times natural size.

Drawn by ELMER W. SMITH

PLATE XXX

OCTOMERIA



W.W. Smith

escarpment, December 31, 1951, *B. Maguire* 32877; Chimantá Massif (Central Section), at 1940 meters altitude, on border of large rocks by large savanna below Upper Falls of Río Tirica above Summit Camp, "sepals yellow with dull brick-red margins and tips; lip maroon; column greenish with pale yellow apex," February 7, 1955, *Julian A. Steyermark & John J. Wurdack* 607.

***Octomeria lancipetala* C. Schweinfurth sp. nov.**

Herba parva vel mediocris, epiphytica. Caules graciles, usque ad 17.5 cm. alti, pluri- vel multiarticulati, vaginis longe tubularibus arctissime celati. Folium lanceolato-lineare, apice acutum vel minute tridenticulatum, crasse coriaceum, circiter usque ad 9 cm. longum et 4.5 mm. latum. Flores parvi, numerosi, in glomerulis axillaribus, cum segmentis patentibus. Sepalum dorsale ovatum vel lanceolato-ovatum, acutum vel acuminatum, trinervium, circiter 4 mm. longum et 2.1 mm. latum. Sepala lateralia similia, sed paulo longiora et angustiora. Petala anguste lanceolata, acuta vel acuminata, uninervia, circiter 3.2–3.8 mm. longa et 1 mm. lata. Labellum segmentis ceteris multo minus, simplex, valde geniculatum, antice late rotundatum et aliquando apiculatum, postice cordato-truncatum, circiter 1.1 mm. longum et 1.5–1.8 mm. latum, cum ungue brevi cuneato; discus basi incassatione obliqua utrinque ornatus. Columna minuta, crassa, apice dilatata, circiter 1 mm. alta.

This species appears to be allied to *Octomeria cordilabia* C. Schweinf., but has commonly much shorter stems and very dissimilar sepals and petals.

AMAZONAS: Cerro Huachamacari, Río Cunucunuma, frequent in cumbre, at 1700 meters altitude, flowers purple, December 4, 1950, *Bassett Maguire, R. S. Cowan & John J. Wurdack* 29823; Same locality, along right fork of Caño de Dios near Summit Camp, at 1800 meters altitude, in dense woodland, December 13, 1950, *Maguire, Cowan & Wurdack* 30170A (TYPE in Herb. Ames No. 69528); Cerro de la Nebulina, Río Yatua, in scrub forest 1 to 5 kilometers north of Cumbre Camp, at 1800 meters altitude, occasional on tree trunks, buds maroon, January 10, 1954, *Bassett Maguire, John J. Wurdack & George*

S. Bunting 37161; Same locality, in swale 2 kilometers northeast of Cumbre Camp, at 1800 meters altitude, on limb of low tree, flowers maroon, November 20, 1957, *Bassett Maguire, John J. Wurdack & Celia K. Maguire* 42150.

***Octomeria nana* C. Schweinfurth sp. nov.**

Herba pusilla, caespitosa, rupicola, usque ad 4 cm. alta. Caules brevissimi, usque ad 13 mm. alti, circiter 2-articulati, vaginis tubulatis marcescentibus celati. Foliolum oblongo-lineare, valde carnosum-coriaceum et per medium sulcatum, acutum, sessile, usque ad circiter 23 mm. longum et 2 mm. latum in sicco. Flores axillares, pauci, glomerati, membranacei. Sepala similia, prope basim trinervia. Sepalum dorsale ovato-oblongum, acutum, concavum, circiter 3.7 mm. longum et 1.5 mm. latum. Sepala lateralia oblique ovato-oblonga, acuta, circiter 3.5 mm. longa et 1.5 mm. lata. Petala oblique oblongo-lanceolata, concava, subacuta, circiter 3.5 mm. longa et 1.2 mm. lata, maxima pro parte uninervia. Labellum segmentis ceteris multo brevius, simplex, suborbiculare, antice rotundatum et apice abrupte acuto, ad basim rotundatum angustatum, trinervium, circiter 2.2 mm. longum et 2 mm. latum; discus in medio obscure bicallosus. Columna minuta, crassa.

This dwarf species seems to have no near allies. The only available flowers occurred at the summit of enlarged, ellipsoid ovaries.

BOLÍVAR: Chimantá Massif, Torono-tepui, north-facing slopes on summit above Caño Mojado, on rock in savanna, at 2030-2150 meters altitude, "lvs. 3-4 mm. thick," February 21, 1955, *Julian A. Steyermark and John J. Wurdack* 1027 (TYPE in Herb. Ames No. 69524).

***Ponthieva ovatilabia* C. Schweinfurth sp. nov.**

Herba terrestris, elata, usque ad 87 cm. alta. Radices fasciculatae, fibrosae, lanuginosae. Folia plura, in herbae basi, longe petiolata; lamina ovato-lanceolata vel elliptico-lanceolata, acuminata, basi cuneata, membranacea, tri-

EXPLANATION OF THE ILLUSTRATION

PLATE XXXI. PONTHIEVA OVATILABIA *C. Schweinfurth.*
1, plant, one half natural size. 2, flower expanded,
with lip and column foreshortened, five times natu-
ral size. 3, lip expanded, six times natural size.

Drawn by ELMER W. SMITH

PLATE XXXI



nervia, 7–13 cm. longa, usque ad 3.8 cm. lata; petiolus canaliculatus, satis gracilis, circiter 5–10 cm. longus. Caulis glanduloso-pilosus, usque ad inflorescentiam circiter 59.6–71.4 cm. altus, vaginis pluribus remotis ornatus. Racemus laxe multiflorus, cum rhachide circiter 10–16 cm. alta. Flores parvi, viridi-albidi. Sepala extus sparse glanduloso-pilosa. Sepalum dorsale elliptico-lanceolatum, ad apicem subacutum angustatum, trinervium, 6–7 mm. longum, circiter 2 mm. latum. Sepala lateralia oblique ovata, subacuta, 6–7 mm. longa, circiter 3.1–3.4 mm. lata, quinquenervia. Petala unguiculata; lamina obliquissime triangularis, acuta, basi semicordata, circiter 4.7 mm. longa et 3 mm. lata; unguis oblongo-linearis, carnosus, circiter 1.3 mm. longus. Labellum columnae parti superiori adnatum, valde inflexum, cum lateribus involutis, expansum in circuitu ovatum, circiter 4 mm. longum et inferne 2.3 mm. latum, parte anteriore oblongo-linearis et parte posteriore suborbiculari; discus basi cum callo rotundato-hippocrateiformi. Columna perbrevis, crassa, supra abrupte dilatata, circiter 2.5 mm. alta.

This species is vegetatively similar to *Ponthieva diptera* Linden & Reichb.f., but the petals and lip are very different. The lip somewhat recalls that of *P. ecuadorensis* Schltr.

AMAZONAS: Cerro de la Neblina, Río Yatua, 700 meters altitude, occasional in *Clusia* scrub forest just south of Camp 3, December 31, 1957, Bassett Maguire, John J. Wurdack and Celia K. Maguire 42559 (TYPE in Herb. Ames No. 69529). BOLÍVAR: Cerro Venamo, northwest slopes, 1100 meters altitude, terrestrial in moist mossy forest, leaves firmly membranaceous, deep green above, dull gray green beneath, pedicels recurved, nodding, pale green, ovary ivory-white, April 21, 1960, Julian A. Steyermark & S. Nilsson 431.